

Magnetic Structure and Method for Forming Same

ABSTRACT

A magnetic structure and method for forming the magnetic structure are described. The method includes providing a template having a plurality of pores and depositing a metallic material into the pores of the template, thereby forming a plurality of nanoscale elements. The template is removed from the nanoscale elements and an annealing process is performed on the nanoscale elements to convert the nanoscale elements into a plurality of hard magnetic nanoscale elements. A soft magnetic material is deposited between the hard magnetic nanoscale elements. The magnetic structure includes a regular array of hard magnetic nanoscale elements and a soft magnetic nanophase interspacing the array of hard magnetic nanoscale elements.

[FIGS. 1A-1F]



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